

Notice of Allowability

Application No.

09/576,179

Examiner

Rip A. Lee

Applicant(s)

GORL ET AL.

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to May 28, 2004.
2. ☒ The allowed claim(s) is/are 19-33.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

This office action follows a response filed on May 28, 2004. Claims 1-18 were canceled, and new claims 19-33 were submitted.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 26 (page 5, line 2) insert the following after the word "step" and before the comma " , ,"

"wherein the fillers are added as a filler suspension with a suspension density of from 0.5% to 10% with respect to the fillers"

Claim 33 (page 6, line 28) insert the following after the word "step" and before the comma " , ,"

"wherein the fillers are added as a filler suspension with a suspension density of from 0.5% to 10% with respect to the fillers"

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Examiner's note:

New claims 26 and 33 were amended to include the phrase, "wherein the fillers are added as a filler suspension with a suspension density of from 0.5% to 10% with respect to the fillers," as per Applicants amendment of claims on November 10, 2003. (A copy of the claims has accompanies this office action). As seen on page 3, amended claim 1 includes this phrase.

The office action dated January 29, 2004 indicated that claims 2, 5, and 18 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since new claim 26 was rewritten to incorporate claim 5 into claim 1, claim 26 necessarily contains this phrase. It follows that claim 33 must also contain this phrase because it represents claim 18 incorporated into claim 1.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 19-33 are allowed over the closest references, U.S. Patent No. 4,788,231 to Smigerski *et al.* and U.S. Patent No. 4,250,082 to Sommer *et al.*

The present invention is drawn to a rubber powder containing: (a) one or more oxidic or siliceous filler comprising at least one selected from the group consisting of 400-5000 phr of synthetic filler and 400-5000 phr of naturally occurring filler and (b) 400-5000 phr of carbon black such that the total amount of filler and carbon black does not exceed 5000 phr and wherein the surface of the oxidic/siliceous filler is modified with one or more organosilicon compounds (see claim for formulae). The rubber powder is prepared by addition of filler to latex in a single step, and the filler is added as a filler suspension with a suspension density of 0.5 to 10 % with respect to filler. The rubber powder particles range in size from 25-3000 μm . Another aspect of the invention is drawn to rubber powders coated with a layer of polystyrene, polystyrene/butadiene copolymers, polyethylenes, or polypropylenes. A further aspect of the invention relates to a rubber granulate comprising particles in the range of 2-10 mm comprising the rubber powder.

Smigerski *et al.* discloses pourable powdered rubber containing filler such as carbon blacks and inorganic substances such as silica in the range of 20-1000 phr wherein combinations of carbon black and light-colored fillers may be used. Smigerski *et al.* does not teach addition of filler in a single step, as presently claimed. Applicants have shown that the rubber powder of the prior art resembles a core-shell particle. In stark contrast, the rubber powder of the present

invention contains filler distributed uniformly throughout the particle. Hence, the difference between the two methods is significant. In light of these facts, the teachings in Smigerski *et al.* do not anticipate or make obvious the subject matter of the present invention.

Sommer *et al.* discloses a pulverulent rubber filled rubber prepared by single precipitation of a mixture of rubber latex and filler suspension. According to the inventors, carbon black filler may be used in the amount of 20-400 pw, and white filler such as silica can also be incorporated in an amount of 20-500 pw. Combinations of carbon black and white filler, within the limits stated for the individual components are also possible. Therefore, use of 400 pw carbon black and 500 pw of silica is well within the scope of the invention of Sommer *et al.* The reference does not impose limitations on the physical dimension of the rubber particles, it does not teach use of the rubber powder in making a rubber granulate, and the patent does not teach a layered rubber powder. As such, the subject matter of the present claims is not taught or fairly suggested in Sommer *et al.*

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

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June 29, 2004



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